




STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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May 24, 1988

TO: **File**

FROM: Frank Filas, Reclamation Engineer 

RE: Site Inspection, Utah Marblehead Lime, M/045/003, Tooele County, Utah

On May, 19, 1988, I toured the Utah Marblehead Lime Plant and Quarry with John Bootle and Jack Minchey of USPCI. USPCI purchased the plant from Utah Marblehead Lime in 1987 with the intention of converting the facility into a hazardous waste incinerator. Tooele County has, to date, denied the necessary zoning change required for this conversion. Utah Marblehead Lime has kept the quarry. It will be necessary to update the reclamation cost estimate for both the quarry and the plant so that a permit transfer of the plant facilities can be made.

Except for maintenance work, the plant and quarry were inactive during our visit. A small amount of limestone is processed for USPCI's use at their hazardous waste facilities at Knolls. It now appears that USPCI will obtain a much larger contract for their product with Geneva Steel. A contractor is employed to mine the limestone and deliver the crushed stone to the plant which is located approximately two miles from the quarry. The stone is being crushed at the quarry now, rather than at the plant site. As a consequence, no additional fines are expected to be added to the 800,000 ton waste pile at the plant.

The approved mine and reclamation includes 159 acres of permit area. The plant permit area encompasses 110 acres, of which approximately 60 acres have been disturbed. Surface disturbance at the plant site is not expected to be increased in the future. The old boneyard at the plant has been cleaned up, and a considerable amount of junk was hauled off during the past year.

The quarry permit area by process of subtraction totals 49 acres. The 2.3 mile haul road covers about 14 acres, and the quarry about 35 acres. It is expected that only the quarry floor will be reclaimed since a highwall variance has been granted and the Bureau of Land Management has indicated that they may want to keep the haul road unreclaimed after mining is concluded. The cost of reclaiming the road will be included in the estimate since a final determination on road reclamation has not been made.



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Memorandum - M/045/003  
May 26, 1988

At the present time, both USPCI and Marblehead Lime have bonds for \$119,257 posted with the Division. This is the amount that the plant and quarry were originally bonded for in 1983. I do not recommend that USPCI's bond for the plant site be reduced unless USPCI can justify lower estimates for structure removal and/or grading than is shown in the attached preliminary estimate. Mr. Bootle of USPCI plans to check into the costs involved in this work to see if a lower estimate can be justified. In conjunction with this work, he also plans to planimeter a recently taken aerial photo to accurately determine the "affected acreage" at the plant site which we estimated to be 60 acres.

I recommend that Marblehead Lime's bond for the quarry reclamation be reduced from \$119,257 to \$51,400, assuming a standard five-year bond period. The quarry reclamation estimate is attached. The estimate submitted by Utah Marblehead Lime in January 1988, totaled \$35,600, but did not include mulching or equipment operating costs.

It is important to note that the mined limestone is now being crushed at the mine site, and consequently, the waste material generated during crushing will be available as a substitute soil material during reclamation. The waste material is gray, very fine, and does not appear to naturally support vegetation. The revegetation test plots indicated that revegetation was possible if mulch and fertilizer were liberally applied during seeding.

clj  
Attachments (2)  
cc: L. Braxton, DOGM  
J. Bootle, USPCI  
W. Hedberg, DOGM  
P. Raines, Marblehead Lime  
H. Shepherd, DOGM  
ID55/1-4

Preliminary  
Reclamation Cost Estimate  
Utah Marblehead Plant Site  
M/045/003

by  
Frank Filas, Reclamation Engineer  
May 24, 1988

Item	Quantity	Unit Cost	Total Cost
I. Removal of Structures, equipment, and trash	Lump Sum		\$ 50,000*
II. Grading and recontouring D-8 Dozer w/ripper	160 hours	\$125/hr	\$ 20,000
Reduce waste pile slopes to 3/1 (approx. 50,000 yds. to be moved), bury foundations, rip and contour pads and roads.			
III. Revegetation			
a. Tractor, disk and 3 laborers	120 hours	\$ 75/hr	9,000
b. Seed (15#/acre)	60 acres	\$100/acre	6,000
c. Fertilizer	60 acres	40/acre	2,400
d. Wood Fiber Mulch	60 acres	330/acre	<u>19,800</u>
		Subtotal	<u>37,200</u>
Total of Item I, II, and III			\$107,200
IV. Ten Percent Contingency			10,700
	Total in 1988 dollars		\$117,900
	Total in 1993 dollars (2.3% inflation for 5 years)		<b>\$132,000</b>

\*Taken from November 8, 1982 estimate by Marblehead Lime Company.



Reclamation Cost Estimate  
Utah Marble Head Quarry  
M/045/003

by  
Frank Filas, Reclamation Engineer  
May 24, 1988

Item	Quantity	Unit Cost	Total Cost
I. Grading, D-7 w/ripper			
a. Recontour Pad Area	120 hours	93.75/hr*	\$11,250
b. Rip and Recontour Roads	60 hours	93.75/hr	<u>5,625</u>
		Subtotal	\$16,875
II. Revegetation			
Broadcast seed with fertilizer and wood mulch	40 acres	620/acre	<u>24,800</u>
Total of Items I and II			\$41,675
III. Ten Percent Contingency			4,165
	Total in 1988 dollars		45,840
	Total in 1993 dollars (2.3% inflation for five years)		<u>51,400</u>

\*Hourly rate for D-7 is calculated as follows:

Rental Rate Blue Book, D-7	\$52.25/hr
Operator	20.00/hr
Operating Cost, Blue Book	<u>21.50/hr</u>
Total	\$93.75/hr

\*\* Reseeding cost per acre is assumed to be the same as calculated in the preliminary plant reclamation estimate.